

## TITLE OF THE INVENTION

Process Delay Monitoring System

[0001]

## BACKGROUND OF THE INVENTION

### Field of the Invention:

This invention relates to a process-delay-monitoring system of monitoring process delays in processing ordered parts for motorcycles, automobiles or general parts (generators, cultivator, or the like).

[0002]

### Description of the Related Art:

In the distribution of parts for motorcycles, automobiles or general parts (generators, cultivator, or the like), when a brand manufacturer receives an order from a domestic or overseas dealer, it checks its own warehouse inventory and orders insufficient parts from the parts manufacturer. Here, when the ordering party is an overseas dealer (for example, in North America), it normally takes 3 months for the ordered parts to arrive. During this time, when there is a next order, the ordering party makes the order before the first ordered parts arrive.

[0003]

The order-receiving party or brand manufacturer receives similar orders everyday from a plurality of domestic and overseas ordering parties. The ordering party notifies the order-receiving party of the order contract number or PC (Purchase Contract) number for each order unit. The order-receiving party manages the ordered parts for each of the same PC numbers. When managing the parts, the implementation record is managed in PC number units for each process after receiving the order. A normal supply-chain management method is used for management in PC number units. In recent years, together with the supply chain, the implementation-record-management database may also be released to the ordering party. Normally, this is called tracking.

[0004]

However, in this normal supply-chain management method, just the implementation record is managed, so the ordering party does not know when the ordered parts will arrive. Therefore, there is a tendency for the ordering party to keep an excess of safety stock. Also, since the order-receiving party does not manage the parts in transit, there is no follow up in the case of trouble. Therefore, unneeded shipping costs and the like are incurred. Furthermore, due to these problems, the trust of the ordering party is lost, and encourages having an unnecessary safety stock.

[0005]

Incidentally, as a means of improving the delivery rate for parts, there is a restocking management system as disclosed in patent document 1. In order to improve the rate of prompt delivery from a sales location to fill a customer's order, the management server performs an update process for updating the target amount of inventory at each sales location based on order information received from a terminal at each sales location; and based on the amount of new orders and changes in the amount of target inventory, it calculates the amount of parts to be restocked at each sales location and outputs restocking-instruction information to the location that has jurisdiction over distribution, and furthermore, each sales location calculates the amount of excess stock based on the difference between the target amount of stock and the actual amount of available stock, and outputs collection information to the corresponding sales locations and the location that has jurisdiction over distribution.

[0006]

[Patent Document 1]

Japanese Patent Publication No. 2002-342431

[0007]

[Problems to Be Solved By the Invention]

In the patent document described above, the amount to restock parts at each sales location is calculated based on the amount of newly received orders and the change in the target amount of inventory, and a proper amount of surplus inventory is kept based on the difference between the target amount of inventory and the actual amount of available inventory.

[0008]

Therefore, in patent document 1, as was explained above, only the implementation record is managed, and the ordering party does not know when the ordered parts will arrive, so there is a possibility that excess safety stock will be kept.

[0009]

Also, in patent document 1, since the order-receiving party does not manage the parts in transit, there is no follow up for trouble, so there is a possibility that unnecessary shipping costs and the like will be incurred.

[0010]

Furthermore, in patent document 1, due to these kinds of problems, there is a possibility that reliability in the order-receiving party will be lost, and encourage keeping unnecessary safety stock.

## SUMMARY OF THE INVENTION

[0011]

Taking into consideration the problems above, the object of this invention is to provide a process-delay-monitoring system that is capable of reducing excess stock, reducing costs such as unnecessary shipping costs, and improving reliability.

[0012]

[Means for Solving the Problems]

The process-delay-monitoring system of this invention comprises: a server and brand manufacturer's terminal that belong to a brand manufacturer, which is the order-receiving party; a dealer's terminal that belongs to the dealer, which is the ordering party and that is connected to the server via a communications line such that they can communicate with each other; and a parts manufacturer's terminal that belongs to the parts manufacturer and that is connected to the server via a communications line such that they can communicate with each other; and where the server has a function of managing information about processing and process delays from the time when the order for parts is received from the dealer's

terminal until the scheduled delivery of the parts, and has a function of providing information about the processing and process delays of the parts being managed, when there is access from the dealer's terminal; and where the brand manufacturer's terminal is used when entering various information and has a communications and display function; the dealer's terminal is connected to the server and is used when giving instructions for ordering parts and viewing information about processing and process delays of the parts, and has a communications and display function; and where the parts manufacturer's terminal receives procurement information from the brand manufacturer's terminal related to the procurement of parts, and has a communications and display function; and where an order contract number is used when accessing the server from the dealer's terminal and brand manufacturer's terminal to view information about processing and process delays for a part.

Also, the server comprises: a received-order database in which the contents of the order received from the dealer's terminal is registered; a work-in-progress database in which the received-order information contained in the received-order contents registered in the received-order database, the ITEM No. for managing that received-order information, and the ID number attached to the ITEM No. are registered; a procurement database in which procurement information for parts ordered from the parts manufacturer is registered; an inventory database in which inventory information for a part and delivery information from the parts manufacturer are registered; a registered-information-management-function unit that has a function of registering received-order contents in the received-order database, registering received-order information in the work-in-progress database, and registering procurement information in the procurement database and work-in-progress database; a management-number-issuing-function unit that has the function of issuing ITEM Nos. for managing the received-order information after the received-order information has been registered; an inventory-check-function unit that has the function of checking from the inventory database whether or not there is inventory after received-order information has been registered by the registered-information-management-function unit; an allocation-process-function unit that has the function of performing an allocation process for

the inventory when the inventory-check-function unit checked and determined there was inventory; a distribution-calculation-function unit that has the function of calculating the distribution and cost of the insufficient part of an order based on the quantity when the inventory-check-function unit checked and determined there is insufficient inventory; a schedule-creation-function unit that has the function of creating a schedule of processing after the date and time that the allocation process was performed when the allocation process was performed by the allocation-process-function unit; a schedule-correction-function unit that has the function of calculating a corrected procedure of processing after it is determined by comparison with the standard procedure that there will be a delay for the insufficient portion, when the inventory-check-function unit checked and determined there was insufficient inventory; and a search-function unit that has the function of searching the information registered in the work-in-progress database according to a work-in-progress-search instruction from the dealer's terminal or brand manufacturer's terminal when there is access from the dealer's terminal or brand manufacturer's terminal, and providing the information to the dealer's terminal or brand manufacturer's terminal; and where the management-number-issuing-function unit has the function of issuing an ID number that is attached to the ITEM No. for managing the procurement information when the inventory-check-function unit checked and determined there was insufficient inventory.

Also, the registered-information-management-function unit can register the ITEM NO. that was issued by the management-number-issuing-function unit and the ID number that is attached to the ITEM No. in the work-in-progress database, register the results of the calculation by the distribution-calculation-function unit in the work-in-progress database, register the schedule created by the schedule-creation-function unit in the work-in-progress database and register the corrected schedule that was created by the schedule-correction-function unit in the work-in-progress database.

The process-delay-monitoring system of this invention is a process-delay-monitoring system comprising: a server and brand manufacturer's

terminal that belong to the brand manufacturer, which is the order-receiving party; a dealer's terminal that belongs to the dealer which is the ordering party and that is connected to the server via a communications line such that they can communicated together; and a parts manufacturer's terminal that belongs to the parts manufacturer that is connected to the server via a communications line such that they can communicated together; and where the server has a process of managing information about processing and process delays from the time when the order for parts is received from the dealer's terminal until the scheduled delivery of the parts, and has a process of providing information about the processing and process delays of the parts being managed, when there is access from the dealer's terminal or brand manufacturer's terminal; and where the brand manufacturer's terminal is used when entering various information and has a communications and display process; the dealer's terminal is connected to the server and is used when giving instructions for ordering parts and viewing information about processing and process delays of the parts, and has a communications and display process; and

where the parts manufacturer's terminal receives procurement information from the brand manufacturer's terminal related to the procurement of parts, and has a communications and display process; and where an order contract number is used when accessing the server from the dealer's terminal to view information about processing and process delays for a part.

Also, the server comprises: a received-order database in which the contents of the order received from the dealer's terminal is registered; a work-in-progress database in which the received-order information contained in the received-order contents registered in the received-order database, the ITEM No. for managing that received-order information, and the ID number attached to the ITEM No. are registered; a procurement database in which procurement information for parts ordered from the parts manufacturer is registered; and an inventory database in which inventory information for a part and delivery information from the parts manufacturer are registered; a process of registering received-order contents in the received-order database, registering received-order information in the work-in-progress database, and registering procurement

information in the procurement database and work-in-progress database by a registered-information-management-function unit; a process of issuing ITEM Nos. for managing the received-order information by a management-number-issuing-function unit after the received-order information has been registered; a process of checking from the inventory database by an inventory-check-function unit whether or not there is inventory after received-order information has been registered by the registered-information-management-function unit; a process of performing an allocation process by an allocation-process-function unit for the inventory when the inventory-check-function unit checked and determined there was inventory; a process of calculating the distribution and cost of the insufficient part of an order by a distribution-calculation-function unit based on the quantity when the inventory-check-function unit checked and determined there was insufficient inventory; a process of creating a schedule by a schedule-creation-function unit for processing after the date and time that the allocation process was performed when the allocation process was performed by the allocation-process-function unit; a process of calculating by a schedule-correction-function unit a corrected procedure for processing after it is determined by comparison with the standard procedure that there will be a delay for the insufficient inventory, when the inventory-check-function unit checked and determined there was insufficient inventory and creating a corrected schedule; and a process of searching the information registered in the work-in-progress database by a work-in-progress search-function unit according to a work-in-progress-search instruction from the dealer's terminal or brand manufacturer's terminal when there is access from the dealer's terminal or brand manufacturer's terminal, and providing the information to the dealer's terminal or brand manufacturer's terminal; and where the management-number-issuing-function unit has a process of issuing an ID number that is attached to the ITEM No. for managing the procurement information when the inventory-check-function unit checked and determined there was insufficient inventory.

Also, the registered-information-management-function unit can have a process of registering the ITEM NO. that was issued by the management-number-issuing-function unit and the ID number that is attached to the

ITEM No. in the work-in-progress database, a process of registering the results of the calculation by the distribution-calculation-function unit in the work-in-progress database, a process of registering the schedule created by the schedule-creation-function unit in the work-in-progress database and a process of registering the corrected schedule that was created by the schedule-correction-function unit in the work-in-progress database.

[0013]

[Effect of the Invention]

The process-delay-monitoring system of the invention described above comprises: a server and brand manufacturer's terminal that belong to a brand manufacturer which is the order-receiving party; a dealer's terminal that belongs to the dealer which is the ordering party and that is connected to the server via a communications line such that they can communicate with each other; and a parts manufacturer's terminal that belongs to the parts manufacturer and that is connected to the server via a communications line such that they can communicate with each other; and where the server manages information about processing and process delays from the time when the order for parts is received from the dealer's terminal until the scheduled delivery of the parts, and provides that information when there is access from the dealer's terminal, so it is possible to reduce excess inventory, and reduce costs due to unnecessary shipping costs and the like, and thus it is possible to improve reliability.

# BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a drawing showing an embodiment of the process-delay-monitoring system of this invention.

Fig. 2 is a drawing for explaining details about the process-delay-monitoring system shown in Fig. 1.

Fig. 3 is a flowchart for explaining the operation of the process-delay-monitoring system shown in Fig. 1.

Fig. 4 is a flowchart for explaining the operation of the process-delay-monitoring system shown in Fig. 1.

Fig. 5 is a flowchart for explaining the operation of the process-delay-monitoring system shown in Fig. 1.

Figs. 6 is a drawing for explaining the screen contents related to the



work-in-progress search by process-delay-monitoring system shown in Fig. 1.

Figs. 7 is a drawing for explaining the screen contents related to the work-in-progress search by process-delay-monitoring system shown in Fig. 1.

Figs. 8 is a drawing for explaining the screen contents related to the work-in-progress search by process-delay-monitoring system shown in Fig. 1.

[0014]

#### DESCRIPTION OF THE PREFERRED EMBODIMENT

An embodiment of the invention will be explained below. In the explanation below, the case in which the dealer is overseas will be explained.

Fig. 1 shows an embodiment of the process-delay-monitoring system of this invention and comprises: the server 10 and the brand manufacturer's terminal 20 that belong to the brand manufacturer which is the order-receiving party; the dealer's 30 terminal that belongs to the dealer which is the ordering party; and the parts manufacturer's terminal 40 that belongs to the parts manufacturer; and these are all such that they can communicate with each other over a communications line 50. To simplify the explanation, only one dealer's terminal 30 and one parts manufacturer's terminal 40 are shown, however, of course there could be a plurality of each kind of terminal. Also, the dealer's terminal 30 could be either a domestic or overseas terminal. The Web, WAN (Wide Area Network) or dedicated line could be used as the communications line 50.

[0015]

The server 10 manages processing and process delays starting from when an order for parts is issued from the dealer's terminal 30 until the parts are schedule for delivery, and it comprises: a received-order database (D/B) 10a, a work-in-progress database (D/B) 10b, a procurement database (D/B) 10c, and an inventory database (D/B) 10d.

The contents of orders received from the dealer's terminal 30 which is the ordering party, are registered in the received-order database 10a. The received-order information (1) to (11) below that is contained in the

registered received-order contents in the received-order database 10a, and ITEM Nos. for managing that received-order information are registered in the work-in-progress database 10b.

[0016]

The following items (1) to (11) below are included in the received-order information:

(1) Ordered part number: This is also called the account number. The account number is a part number comprising numbers and alphabet letters that are listed in the parts list.

(2) Part name: Part name

(3) Current and past classifications: Current: Parts for a model currently in production. Past: Parts for an already old model.

(4) 2/4 General classifications: 2: Motorcycle 4: Automobile General: General parts (generator, cultivator, etc.)

(5) Year classification: Identification numbers for classifying models into models in production, 5-year old models, 10-year old models, other old models.

(6) Date order is received.

(7) Time order is received.

(8) PC (Purchase Contract) number

(9) Received order cost

(10) Order region: Region where the ordering party is located (Example: North America, Europe, Southeast Asia, etc.).

(11) Order type: Shipping method desired by the ordering party (Example: Ship, air, etc.).

[0017]

Also, procurement information for ordering parts from the parts manufacturer that where determined by a inventory check to be in stock but insufficient, and identification numbers that are attached to the ITEM Nos. for managing that procurement information are registered in the work-in-progress database 10b.

[0018]

The following items (12) to (18) below are included in the procurement

information:

- (12) Ordered quantity
- (13) FOC: Forecast of Control (Forecast control)
- (14) Order ID: Identification of order method
- (15) Manufacturer code
- (16) Order number
- (17) Procurement manager: Indicated by a code number.
- (18) Delivery location

[0019]

The procurement information (12) to (18) above that is registered in the work-in-progress database 10b is registered in the procurement database 10c.

Inventory information, delivery information and the like for parts are registered in the inventory database 10d.

Moreover, as shown in Fig. 2, the server 10 comprises: a registered-information-management-function unit 11, management-number-issuing-function unit 12, inventory-check-function unit 13, allocation-process-function unit 14, distribution-calculation-function unit 15, schedule-creation-function unit 16, schedule-correction-function unit 17 and work-in-progress-search-function unit 18.

[0020]

The registered-information-management-function unit 11 has the function of registering the contents of the received order in the received-order database 10a, registering the received-order information in the work-in-progress database 10b, and registering the procurement information in the procurement database 10c and work-in-progress database 10b. The management-number-issuing-function unit 12 has the function of issuing ITEM Nos. for managing the received-order information, and ID numbers that are attached to the ITEM Nos. for managing the procurement information.

[0021]

When received-order information is registered by the registered-information-management-function unit 11, the inventory-check-function

unit 13 has the function of checking from the inventory database 10d whether or not there is inventory. When checking whether or not there is inventory, the order part numbers are used. When the inventory-check-function unit 13 checks whether or not there is inventory, the allocation-process-function unit 14 has a function of performing an allocation process on the inventory.

[0022]

When inventory was checked and found to be insufficient by the inventory-check-function unit 13, the distribution-calculation-function unit 15 has the function of calculating the distribution cost of that insufficient portion based on the quantity. The results of the distribution calculation are registered in the work-in-progress database 10b by the registered-information-management-function unit 11. When the allocation process is performed by the allocation-process-function unit 14, the schedule-creation-function unit 16 has the function of creating a schedule for processing after the date and time that that allocation process was performed. That schedule is created based on the standards (number of days) that were set beforehand. Also, the created schedule is registered in the work-in-progress database 10b by the registered-information-management-function unit 11.

[0023]

When the inventory is checked by the inventory-check-function unit 13 and found to be insufficient, the schedule-correction-function unit 17 has the function of making a comparison with the standard procedure (number of days) for the insufficient portion, and when it is determined there will be a delay, calculating a corrected procedure for post processing and creating a corrected schedule. That created corrected schedule is registered in the work-in-progress database 10b by the registered-information-management-function unit 11. When there is access from the dealer's terminal 30, the work-in-progress-search-function unit 18 has the function of searching the information registered in the work-in-progress database 10b according to a work-in-progress search instruction from the dealer's terminal 30 and providing that information to the dealer's terminal 30.

[0024]

The brand manufacturer's terminal 20 is used when entering various information, and it has a communication function and display function. The various information entered includes for example: received-order information, date and time of allocation process, date and time of an order to the parts manufacturer, procurement information for the parts manufacturer, date and time for receiving a delivery, date and time of removal from the warehouse, date and time of packaging, invoice number, date and time of port departure, date and time of port entry, etc.

[0025]

The dealer's terminal 30 is used when viewing order instruction or information that is registered in the work-in-progress database 10b, and it has a communication function and display function. Also, when using the dealer's terminal 30 to view information registered in the work-in-progress database 10b, a PC (Purchase Contract) number, which is the contract number for the order, is used.

The parts manufacturer's terminal 40 receives procurement information from the brand manufacturer's terminal 20 and has a communication function and display function.

[0026]

Next, the operation of the process-delay-monitoring system will be explained.

First, as shown in Fig. 3, an order is received from the dealer's terminal 30 (step S1), and when the contents of that received order are entered using the brand manufacturer's terminal 20, the entered received-order contents are registered in the received-order database 10a by the registered-information-management-function unit 11 (step S2). Also, after the received-order contents have been registered, the received-order information (1) to (11) described above is registered in the work-in-progress database 10b by the registered-information-management-function unit 11 (step S3). At this time, ITEM Nos. for managing that received-order information are assigned by the management-number-issuing-function unit 12 and registered in the work-in-progress database 10b (step S4).

[0027]

After the received-order information has been registered in the work-in-progress database 10b, the received-order part numbers are used by the inventory-check-function unit 13 to check from the inventory database 10d whether or not there is inventory (step S5), and when there is inventory, the number of insufficient parts is checked (step S6). When there are no insufficient parts, the allocation-process-function unit 14 performs the allocation process for the parts in inventory, and after the date and time of that allocation process is entered using the brand manufacturer's terminal 20, the entered date and time of that allocation process is registered in the work-in-progress database 10b (steps S7 to S9). After the date and time of the allocation process have been registered in the work-in-progress database 10b, the schedule-creation-function unit 16 creates the schedule and calculates the procedure schedule (steps S10, S11). Calculation of the procedure schedule is performed based on preset standards (number of days). Also, the schedule for processing after the procedure schedule has been calculated is registered in the work-in-progress database 10b (step S12).

[0028]

On the other hand, in step S5, when there is no inventory, parts must be ordered from the parts manufacturer, and the date and time of that order is registered in the work-in-progress database 10b (steps S13 to S15). Next, for the portion to be ordered from the parts manufacturer, the procurement information (12) to (18) described above is entered using the brand manufacturer's terminal 20, and that procurement information is registered in the work-in-progress database 10b (steps S16, S17). The procurement information that is registered in the work-in-progress database 10b is also registered in the procurement database 10c (step S18). Also, the procurement information that is registered in the procurement database 10c is sent to the parts manufacturer's terminal 40. When there is a delivery from the parts manufacturer based on this procurement information, the product quality is checked, and when there are no parts to be returned, the information for the delivered parts is registered in the inventory database 10d (steps S19 to S21). Next, after the delivery receiving date has been entered, that delivery receiving date is registered in

the work-in-progress database 10b (steps S22, S23).

[0029]

On the other hand, in step S6, when there are insufficient parts, and in step S20 when there are parts to be returned, the management-number-issuing-function unit 12 issues an ID number to be assigned to the ITEM No. for managing the procurement information, and further, the distribution-calculation-function unit 15 calculates the cost of the received order based on the quantity, and the result is registered in the work-in-progress database 10b (steps S24 to S27).

[0030]

Next, as shown in Fig. 4, the part is checked whether it is an allocation-process part (step S28). In other words, an allocation-process part is a part in the brand manufacturer's inventory, and a part that is not an allocation-process part is a part that is delivered from the parts manufacturer. In the case of an allocation-process part, the following work or warehouse-removal process is performed, and when the warehouse-removal process is completed, the warehouse-removal date and time are entered (step S29). The warehouse-removal date and time are registered in the work-in-progress database 10b. In this case, the warehouse-removal date and time can automatically be entered by scanning the barcode of the part specifications attached to the part.

[0031]

On the other hand, when the part is not an allocation-process part, the procedure is compared with the standard (number of days) (step S30), and when it is determined there would be no delay, the input becomes the warehouse-removal date and time entered in (step S29), and when it is determined there will be a delay, the schedule-correction-function unit 17 performs schedule correction based on the standard procedure (number of days), and the created corrected schedule is registered in the work-in-progress database 10b (steps S31, S32). Here, the standard procedure (number of days) is the procedure in the first schedule calculated and created from the date and time of the received order. Also, the object of the comparison in step S30 is the record of delivery receiving dates with respect

to this first schedule.

[0032]

Also, the warehouse-removal date is compared with the standard procedure (number of days) (step S33), and when there will be no delay, the first schedule is registered in the work-in-progress database 10b (step S34). However, when there will be a delay, the schedule-correction-function unit 17 corrects the schedule for the following processing based on the standard procedure (number of days) (step S35), and the created corrected schedule is registered in the work-in-progress database 10b (step S34).

[0033]

Next, the date and time that packaging (1) was performed is entered (step S36), and by making a comparison with the standard procedure (number of days) (step S37), when there will be no delay, the date that packaging (1) was performed is registered in the work-in-progress database 10b (step S38). However, when there will be a delay, the schedule-correction-function unit 17 corrects the schedule for the following processing based on the standard procedure (number of days) (step S39), and the created corrected schedule is registered in the work-in-progress database 10b (step S38).

[0034]

Similarly, the date and time that packaging (2) was performed is entered (step S40), and by making a comparison with the standard procedure (number of days) (step S41), when there will be no delay, the date that packaging (2) was performed is registered in the work-in-progress database 10b (step S42). However, when there will be a delay, the schedule-correction-function unit 17 corrects the schedule for the following processing based on the standard procedure (number of days) (step S43), and the created corrected schedule is registered in the work-in-progress database 10b (step S42).

[0035]

Similarly, when the vanishing date and time is entered (step S44), as shown in Fig. 5, by making a comparison with the standard procedure



(number of days) (step S45), when there will be no delay, that vaning date and time are registered in the work-in-progress database 10b (step S46). However, when there will be a delay, the schedule-correction-function unit 17 corrects the schedule for the following processing based on the standard procedure (number of days) (step S47), and the created corrected schedule is registered in the work-in-progress database 10b (step S46).

[0036]

Similarly, when the customs-clearance date and time is entered (step S48), by making a comparison with the standard procedure (number of days) (step S49), when there will be no delay, that customs-clearance date and time are registered in the work-in-progress database 10b (step S50). However, when there will be a delay, the schedule-correction-function unit 17 corrects the schedule for the following processing based on the standard procedure (number of days) (step S51), and the created corrected schedule is registered in the work-in-progress database 10b (step S50).

[0037]

Next, after the invoice number is issued during customs clearance, the entered invoice number is registered in the work-in-progress database 10b (steps S52, S53). Here, the invoice number indicates that the parts have left the port, and for the ordering party, it becomes the management number when receiving the parts. Also, both the date and time the parts left the port and the date and time the parts entered the port are registered in the work-in-progress database 10b (steps S54 to S57), and after that, the parts arrive at the DIST (distributor) (step S58).

[0038]

Here, when the server 10 is accessed from the dealer's terminal 30, the work-in-progress-search-function unit 18 responds and it becomes possible to view the information registered in the work-in-progress database 10b. When viewing the information registered in the work-in-progress database 10b, the PC number described above is used. Also, for example, as shown in steps S60 to S63, a work-in-progress-search screen, a screen showing a list of dates for each process, a screen showing a list of items for each session, and a screen showing specifications are displayed at the dealer's

terminal 30. The list of items of each session, and the list of specifications give data for parts that are delayed from the first schedule.

[0039]

Here, for example, when a search-menu screen is displayed at the dealer's terminal 30 as shown in Fig. 6(a), and the item 'Search work in progress' is clicked on from that screen, the detail screen for the work-in-progress search is displayed as shown in fig. 6(b). Here, as check items for specifying the search pattern there are (PC/NO), (ORD REF NO), and (ordering location + receiving location + part number). Here, when (PC/NO) is selected and the PC number described above is entered, the search results are displayed as shown in Fig. 7(a). From the search results, it is possible to know whether or not processing is complete for each part number, which are the part numbers of the received order, and it is possible to check the date that processing was completed, the scheduled date of arrival, etc. Also, in the search results shown in Fig. 7(a), when the field for a part number, which is a part number of the received order, is selected, the list of data for each process corresponding to the selected part number is displayed as shown in Fig. 7(b). From this it is possible to check details of each process from when the part is ordered until it arrives at the DIST (distributor). Moreover, in the search results shown in Fig. 7(a), when one of the quantity fields is selected for example, a list of details for the selected quantity is displayed as shown in Fig. 7(c). From this it is possible to check details about the quantity. The screens shown in Fig. 7(a) to Fig. 7(c) are updated according to changes in the contents, so it is possible to check the contents shown in Fig. 7(a) to Fig. 7(c) in realtime.

[0040]

Also, when (ordering location + receiving location + part number) is selected on the screen shown in Fig. 6(b), a list of the number of case for each session is displayed as shown in Fig. 8(a). On this screen, it is possible to check the number of items for each process and number of days of delay. The contents of this screen are similarly updated according to changes in the contents, so it is possible to check the list of the number of items for each session in realtime. Furthermore, when one of the items is selected on this screen, a list of details (delay) corresponding to each part

number is displayed as shown in Fig. 8(b). Similarly, this screen is updated according to changes in the contents, so it is possible to check the scheduled date of arrival in realtime.

[0041]

In this way, this embodiment of the invention comprises: a server 10 and brand manufacturer's terminal 20 that belong to the brand manufacturer, which is the order-receiving party; a dealer's terminal 30 that belongs to the dealer which is the ordering party and that is connected to the server 10 such that it can communicate via a communication line 50, and a parts manufacturer's terminal 40 that belongs to the parts manufacturer and that is connected to the server 10 such that it can communicate via a communication line 50, and where the server 10 manages the processing and process delays from when the order for parts is received from the dealer's terminal 30 until the parts are scheduled for delivery, and that information is provided according to access from the dealer's terminal 30.

[0042]

By doing this, since it is possible to check in realtime the information about processing and process delays from the time the order is received until the scheduled delivery of the parts, it is possible for the ordering party to easily know when the ordered parts will be delivered, and thus there is no need for keeping excess safety stock.

[0043]

Also, on the order-receiving side, by registering the information about processing and process delays from the time the order is received until the scheduled delivery of the parts in the work-in-progress database 10b, together with making a comparison with the standard procedure (number of days), when there are process delays, the information for each delay is registered in the work-in-progress database 10b, so management during transit can be performed, and follow can be easily performed for trouble, and thus it is possible to do away with unnecessary shipping costs.

[0044]